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EXAMINER				
WARREN, DAVID S				
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2837				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/583,047

**Applicant(s)**

KASHIOKA, SEIJI

**Examiner**

DAVID S. WARREN

**Art Unit**

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. The Applicant, a pro se inventor, has filed (January 4, 2008) new claims 1 – 10 without canceling any previous claims 1 – 9 (filed June 15, 2006) nor claims filed under Article 19 (also filed June 15, 2006). For the purposes of this rejection, the Examiner will consider (since this is a pro se Application) newly filed claims as those claims, and only those claims as the only claims pending in the Application. It is required, that in any subsequent communication regarding this Application, the Applicant must cancel all claims filed prior to January 4, 2008 (e.g., this may include the simple statement: "The claims presented in this correspondence (or amendment) replaces all previous claims." The Applicant is also required to re-number claims in accordance with MPEP 714 (especially paragraph (c) - the Applicant should have canceled claims 1 – 9 filed on June 15, 2008 and replaced with new claims 10 – 19 filed on January 4, 2008). Also, the Applicant is required, in any subsequent amendments, to include claim status identifiers (MPEP 714, paragraph (c)), e.g., "canceled," "new," "amended," "previously presented," etc.
2. Also, the Examiner appreciates Applicant's excellent effort to provide an application written in proper idiomatic English. However, the Application is still replete with many grammatical errors (especially the newly submitted claims). The Examiner is willing, if allowable subject is found to exist in the claim, to rewrite the claim for the

Applicant maintaining the scope of the allowable subject matter (if any). Therefore, the Applicant is encouraged to focus on proper patent prosecution procedure as noted below.

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 – 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claims 1 and 7 - 9 are directed to "systems" and "compound systems" while reciting method steps (first function, second function, etc.). Therefore, in accordance with MPEP 2173.05 (p)(II), these claims are deemed to be non-statutory since they are "directed to neither a 'process' nor a 'machine,' but rather embrace or overlap two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted as to set forth the statutory classes of invention in the alternative only."

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2837

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 – 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In accordance with MPEP 2173.05(p) (II):

A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. *IPXL Holdings v. Amazon.com, Inc.*, 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005); *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990)

The Examiner suggests that the Applicant re-write claim 1 as follows:

**Claim 11.** System for displaying a music score...etc.

Fist data memory for holding base data...etc.

Second data memory for holding detailed tempo data...etc.

An autonomous advancing means for autonomously advancing...etc.

A partition setting means for setting up a partition of display space...etc.

A display renewal means for renewing display image...etc.

A difference correcting means for correcting the difference between...etc.

The Examiner is not saying that claim 11 just presented is allowable, this claim is merely provided to the pro se Applicant as an example of proper claim language.

3. In claim 2, it is not clear as to what is meant by "enough" time. This is a relative term, the Applicant has not provided any standard for comparison.

***Claim Rejections - 35 USC § 103***

This rejection is repeated from the last office action. This is done for three reasons: (1) the newly supplied claims show no indication of any amending to the claims (although the claims have been amended), it is difficult for the Examiner to determine how the new set of claims differs from those previously filed (June 15, 2008); (2) the grammatical and U.S.C. 101 rejection make it difficult for the Examiner to determine the scope (i.e., the statutory class) of the claim; (3) as discussed below, the Applicant's arguments are not persuasive.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitrick (7,098,392). Regarding claim 1, Sitrick discloses a system for displaying a music score, having a first memory for storing a score (col. 8, last paragraph), storing a tempo in Sitrick's mode (as an automatic page turner, Sitrick also shows the use of MIDI control, tempo is a well-known MIDI element which, like all MIDI, needs to be stored) would inherently store a tempo, a first function of automatic advance ("turning pages" is deemed to be an autonomous advance of a score – Sitrick's automatic mode appears to

Art Unit: 2837

be synonymous with Applicant's definition of "autonomous" i.e., "self-governing"), a second function for setting up partition of a display and a third function which renews the display at a partition (see Sidick's discussion of "slices" - fig. 23; col. 32, lines 35 – 45; this feature could also be considered synonymous with Sitrick's pagination feature where page breaks are in accordance with bars, etc. – see last paragraph of col. 31), and a fourth function, that corrects difference (Sitrick's adjusting the display to the performer is synonymous with "corrects difference between internal music and ... performance." Regarding claim 7, Sitrick discloses the use of a master-slave arrangement (figs. 1, 2, and 7c) as two performer systems. Sitrick states:

In one embodiment, two Performer subsystems are operable alternatively as one of a single appliance as a linked set a linked mode and as two independent appliances a stand-alone mode, wherein in the linked mode each of the two Performer subsystems operate cooperatively with each other as a linked set to provide a two page display on the video presentation, and wherein in the stand alone mode each of the two Performer subsystems operates independently and mutually exclusive of the other to provide two independent and mutually exclusive single page displays on the video presentation.

Regarding claim 8, Sitrick discloses the use of a touch screen display that can be used to position the current location to any point in the score, this is interpreted as "both directions." Sitrick states:

FIG. 17 illustrates the manual mode (1250), which provides for user manual selection of functions (1252), such as hitting a button or a touch screen to cause the turning of the page of the display, or to go back a page or to scroll forwards or backwards, or to increase the font size or magnification of the music presentation.

3. Claims 2 – 6, 9, and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Sitrick (discussed supra) in view of Grubb et al. (5,913,259). Regarding claim 2, as best as can be understood (see §112 rejection supra – see Examiner's interpretation), Sitrick does not teach the use of providing a note with enough distance in both forward and backward direction from the partition to be renewed. Grubb discloses that a window (i.e., a partition) is moved slightly to the left or right to make the window move through the score and "follow the performer" (col. 9, lines 30 – 40). Regarding claim 3, Sitrick does not disclose the use of multi-level timing inputs regarding reliability and correction. Grubb discloses three levels of input (performer's source position, current location, and estimated distance traversed, which is based on tempo – col. 5, lines 39 - 56) and the use of finding a "most probable" location (this would appear to be synonymous with Applicant's "reliability" feature). Regarding claim 4, while neither Sitrick nor Grubb specifically state using Applicant's ratio calculations. Grubb specifically states using calculations (i.e., models) from a previous correction (previous observation) and current locations to adjust tempo (it appears that Applicant's "durations" have to do with tempo clock durations, therefore, the Examiner is equating "durations" to tempo). Therefore, Applicant's claim 4 and Grubb's system of adjusting tempo and location, appear to be functionally equivalent. Regarding claims 5 and 6, Official Notice is hereby taken that storage of data is well-known. Furthermore, Grubb uses estimated tempos in modeling a current position, presumable, those tempos would somehow need to be stored to become available for use in any modeling. Regarding



claim 9, all limitations have been discussed supra. Regarding claim 10, Sitrick discloses the use of slices (figs. 23 – 25) that are used to renew the display. The Examiner acknowledges that Sitrick is silent as to “lower enough” [sic] and “upper enough” [sic] note displays, but Sitrick’s slice method is used to efficiently perform the function of renewing the display so as to provide an easily readable score. The Examiner maintains that this is functionally equivalent to providing “enough time period...of displaying whole page.” It would have been obvious to one of ordinary skill in the art to combine the teachings of Sitrick and Grubb to obtain a score display system having the partitioning system (i.e., windowing system) to efficiently track a musician’s performance. The motivation for making this combination would be to simulate the turning of pages by a human “page-turner,” specifically, to turn a page before the musician has reached the last notes (or measures). This gives a musician the ability to smoothly transition from page to page.

### ***Response to Arguments***

4. Applicant’s arguments filed January 4, 2008, have been fully considered but they are not persuasive. The Applicant argues that Sitrick does not store tempo data. Sitrick allows a user to input tempo data to control automatic advance of a score. This data, as input by a user, would inherently need to be stored to be processed, etc. Furthermore, Sitrick shows the use of MIDI (with inherent stored tempo data). The Applicant also argues that Sitrick does not show the features of the “first function.” Sitrick does show

an automatic advancing mode - isn't this "autonomous" as Applicant has defined. Furthermore, it is not clear what Applicant means by "measuring the duration time." Does Applicant mean "calculation" of the duration time? The Applicant argues that Sitrick does not show partitions but has not provided any evidence. Sitrick shows "slices" as well as two-page displays. Aren't these slices, and/or one page of a two-page display synonymous with Applicant's partition? Applicant even refers to renewing pages (not partitions) in comments – line 8 of Remarks filed January 4, 2008.

5. The Applicant is asked to specifically state the difference between Applicant's partitions and Sitricks "slices" and/or pages (e.g., on a two-page display). The Applicant is also ask to specifically state how the "automatic mode" of Sitrick differs from Applicant's "autonomous" mode.

### ***Allowable Subject Matter***

The Examiner believes that allowable subject matter may exist in the current Application. Claim 4 may be allowable if all outstanding rejections (i.e., §101, §112, and §103) can be overcome and if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Specifically, the Applicant must show how the "physical time" in claim 4 is not the same as "music time" in claim 1.

***Conclusion***

6. Since the Applicant is filing without the assistance of a registered patent professional, the Examiner highly recommends that the Applicant contact the Examiner after receiving this Office Action and prior to sending in any communication with the Patent Office regarding the prosecution of this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID S. WARREN whose telephone number is (571)272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-2837. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David S. Warren/  
Patent Examiner, Art Unit 2837